

ANALYSIS AND EVALUATION OF RECORD KEEPING SYSTEMS
IN SELECTED OHIO RETAIL FOOD STORES

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Introduction

The retail food industry today is an excellent example of the dynamic character that typifies modern American business. The changes that have come about in this industry stagger the imagination when one considers the short period of time in which they have been accomplished.

A case in point is the rapid change in the size of the retail food outlets. Dollar sales per food store in Ohio rose from \$24,578.00 in 1929 to \$116,548.00 in 1954, an increase of 368.48 percent.¹ By the same token, the total number of food stores in Ohio decreased from 27,641 in 1929 to 19,852 in 1954, a decrease of 29.18 percent;² and the total sales for retail food stores increased from \$687,639,-800.00 in 1929 to \$2,313,717,000.00 in 1954, an increase of 236.47 percent.³ Also the number of families per food store has doubled from 1929 to 1954.⁴

In contrast, the dollar sales per store for all retail stores increased from \$35,299.00 in 1929 to \$110,709.00 in 1954⁵- an increase of 213.63 percent, not nearly as great as the increase for food stores during the same time period. The total number of all retail stores actually increased from 80,155 in 1929 to 86,681 in 1954,⁶ a jump of 8.39 percent as opposed to the decrease of 29.18 percent in the number of retail food stores. In addition the total dollar

1. See Table 2.
2. See Table 1.
3. See Table 3.
4. See Table 4.
5. See Table 3.
6. See Table 1.

sales for all retail sales rose from \$2,829,354,000.00 in 1929 to \$9,618,537,000.00 in 1954⁷ - an increase of 239.96 percent, practically the same as the gain in retail food store sales. The gain in families per store for all retail stores was only 50 percent,⁸ 51 percent less than that for food stores.

To add to the previous data, consideration should be given to the following information: (1) food store sales expressed as a percentage of all retail store sales have remained constant from 1929 to 1954 at approximately 24 percent,⁹ (2) food store numbers expressed as a percentage of total retail store numbers has decreased from 37.46 in 1929 to 22.85 percent in 1954.¹⁰

7. See Table 3.

8. See Table 4.

9. See Table 3.

10. See Table 1.

Table I

Total Number of All Retail Stores and Retail Food Stores and Number of Food Stores Expressed as a Percentage of the Number of All Retail Stores and Figures Expressed as a Percent of 1929 Figures, Ohio, Selected Periods, 1929 to 1954

Year	No. of All Retail Stores	Percent of 1929	Number of Food Stores	Percent of 1929	1929 = 100	
					No. of Food Stores Ex- pressed As A Percentage of All Retail Stores	
1929	80,155	100.00	27,641	100.00	34.48	
1939	93,041	116.08	29,612	107.13	31.83	
1948	87,066	108.62	24,894	90.06	28.59	
1954	86,881	108.39	19,852	71.82	22.85	

Source: U.S. Census of Retail Trade
1929, 1939, 1948, 1954

Table II

Dollar Sales Per Store for All Food Stores and for All Retail Stores and Figures Expressed as a Percentage of 1929 Figures, Ohio, Selected Periods, 1929 to 1954

Year	Dollar Sales Per Store For All Retail Stores	Percent of 1929	1929 = 100	
			Dollar Sales Per Store For All Food Stores	Percent of 1929
1929	\$ 35,899	100.00	\$ 24,878	100.00
1939	26,239	74.33	20,568	82.68
1948	84,685	239.91	72,963	293.23
1954	110,709	313.63	116,548	468.48

Source: U.S. Census of Retail Trades
1929, 1939, 1948, 1954

Table III

Total Dollar Sales of All Retail Stores, and Total
 Dollar Sales of All Food Stores, and Figures Expressed
 as a Percentage of 1929 Figures, and Total Dollar
 Sales of All Food Stores Expressed as a Percentage
 of the Dollar Sales of All Retail Stores, Ohio,
 Selected Periods, 1929 to 1954

Year	Total Dollar Sales of All Retail Stores	Percent of 1929	Total Dollar Sales of All Food Stores	Percent of 1929	Dollar Sales of Food Stores Expressed as a Percentage of Dollar Sales of All Retail Stores
1929	\$2,829,354,000	100.00	\$687,639,860	100.00	24.30
1939	2,441,293,000	86.28	609,065,000	88.57	24.95
1948	7,373,173,000	260.60	1,816,344,000	264.14	24.63
1954	9,618,537,000	339.96	2,313,717,000	336.47	24.05

Source: U.S. Census of Retail Trade
 1929, 1939, 1948, 1954.

Table IV

Number of Families Per Store For All Food Stores
 and All Retail Stores and Figures Expressed as a
 Percentage of 1939 Figures, Selected Periods, 1939
 to 1954

Year	1939 = 100			
	No. of Families Per Store For All Retail Stores	Percent of 1939	No. of Families Per Store For All Retail Stores	Percent of 1939
1939	20	100.00	64	100.00
1948	27	135.00	94	146.88
1954	30	150.00	129	201.56

Source: U.S. Census of Retail Trade
 1939, 1948, 1954.

In addition to these figures, consideration should be given to the rise of the supermarket in conjunction with our discussion of the rapid rise in size of the retail food store. Since its advent in the early 1930's, the depression born supermarket has grown very rapidly from 19.4 percent of total retail grocery store sales in 1939 to 52.3 percent in 1954¹¹ while the number of supermarkets expressed as a percentage of all grocery stores was 3.2 in 1948 and only 5.0 in 1954.¹² Thus, again it is found that the supermarkets, defined by the Supermarket Institute as "a departmentalized retail establishment having four basic food departments - self-service grocery, meats, produce, and dairy and other departments, with a combined minimum sales of \$5000,000.00 annually", has grown tremendously in sales volume while remaining relatively constant in numbers.

All of the preceding information points to the single fact that the average food retailer is dealing with a much larger business than he did in 1929. When the addition to this of the much keener competition among food retailers and the ever-rising costs of operation is made, there is a greater need than ever before for the food retailer to obtain as much pertinent information as frequently as is economically possible about his business.

11. Source: Super Market Institute

12. Ibid.

For these reasons attention was drawn toward the record keeping operation in the retail food stores in the state. The rest of this thesis will present what the results of the pilot study were and some of our feelings as to what the food retailers of the state should do to help improve the situation.

Purposes and Objectives

Due to the fact that food merchandizing activities are just being started in the state, it was felt that there was a lack of basic data concerning the situation in retail grocery stores in this area. Also, a clear picture of the exact needs and problems of these grocers is needed. Thus, since the primary task of research in this field is to help the food retailers in the state to isolate and solve their problems, a case study of selected food stores to collect the needed material concerning some of their problems has been set out upon.

From this data and the results of its analysis educational programs along this line will be formed. Then, later on in the study, an analysis of these educational methods and an evaluation of their effectiveness in assisting the food retailers with their problems will be made.

The objectives of this study are outlined as follows:

1. To find out what kind of records are being kept in the stores in the study.
2. To find out how the analysis of these record ^{keeping} systems is used in planning future improvements

and correcting weaknesses in the various stores.

3. To develop a set of principles of good record keeping from the information collected in this study and from accepted accounting form for the retailers to use in a brief, but critical analysis of their store records.

Methodology

Sample. The sample in this study is comprised of eight independent retail food stores. Four of these stores are located in Marion, Ohio, and vicinity, and the other four in Columbus, Ohio. The four stores in Marion and vicinity are doing not in excess of \$250,000.00 in annual gross sales; while the Columbus stores are doing between \$350,000.00 and \$1,500,000.00 in annual gross sales. There is no significance in these levels of dollar sales. These are merely arbitrary limits set up by existing conditions.

The sample will contain considerable bias in that these retailers are considered to be progressive businessmen and their records in some cases may show up in the analysis to be better than the national averages. However, when one considers that the case study approach was used with the primary purpose of analyzing the situation in search of principles of good record keeping rather than merely describing it as the survey type of study tends to do, it is plain that this bias loses most of its importance.

The following conditions tended to limit the size of the sample to eight stores: (1) Lack of funds for a larger study (2) Lack of personnel to do an adequate job on a larger

study (3) The similarity between the methods of operation in retail food stores that would make unnecessary a larger sample at this stage of analysis of the problem.

Another bias that may enter here is the selection of stores that would cooperate fully in the study. This was done because in order to do a complete job of analysis of the record keeping system complete knowledge of the entire store operations was necessary. The similarity of other store operations enters here to remove the strength of this bias.

Interviews

Three interviews were made to collect the data needed for this study. The first was an interview with the store owners with an attempt made to get data concerning the management practices in the store and additional information to supplement the data taken from the store records. The second interview was with the department managers, in the four stores where they are employed, with the purpose of finding out how the store and department records are used in daily operation of the store. The third interview was made to measure the physical facilities of the store and to sketch a floor plan.

On any one of these three interviews the store records for the year 1955 and 1956-to-date were procured from the store owners. Also additional visits were made to the stores whenever it was necessary to clear up any difficulties that had arisen.

Records

After the records had been collected, data were taken from them to be used in the analysis of the business operation. Also an appraisal was made of the record keeping system and its place in the operation and growth of the store.

The emphasis that was put on the collection of data was not on the dollar figures themselves, but on the comparisons that will be drawn from these data in the analysis and the use of this analysis in finding the weaknesses and strengths of the businesses. Our interest is not in finding out the dollar figures that make up all of the various items on the records. It is in seeing if these figures are in line with national and local averages.

Description of the Record Keeping System

In this section, a general description of the record keeping systems was made. Included with the description will be any unusual conditions in the store that would tend to have an effect on the records. Also a brief discussion of how the records are used by the store owners in their business is given.

Analysis

The analysis of the various record keeping systems will be made from two different approaches. The first approach will be to set up a standard that is considered to contain

all the tools necessary for a good job of analysis and compare the record keeping system of the stores in the sample to it and see where their weaknesses and strengths are. The second approach will be to place the stores in two groups of comparable size and see where the stores stand in relation to each other and to national averages. The first part of the analysis deals primarily with the form of the system, while the second part is mainly a figure analysis. It may be well to point out here that this analysis of record keeping systems does not deal with the method of daily collection of data for the various categories. The point of view used in this thesis is to look at how the data are handled, how often it is collected, and how it is used in looking into the future to help improve store operations.

Part I - Description of Records Kept in the Stores and their use in Store Operation

In describing the record systems and their uses in the various stores, the identity of the stores will not be revealed for rather obvious reasons. The stores will be named stores A through H in order to give them identity for the reader of this thesis.

The purpose of this description is to show the mechanics of the record keeping operations in the various stores and to get the reader to see the peculiarities in each situation that may have an effect on the way that the individual store owners handle their record keeping operations. It is hoped also to show the strong and weak points of the various record keeping systems and lastly to set the stage to move into the record analysis section of the thesis. In conjunction with this last step, the framework will be set up for applying the analysis and moving into the conclusion and recommendation section.

Store A

Store A is the smallest store in the sample, both in sales area and in annual gross sales. The store area in square feet is 500 and the total gross sales for 1955 was a little in excess of \$65,000.00.

In conjunction with small size and sales volume, there is another peculiarity that has a great deal of influence on

the entire operation of the store. This factor is a rather intangible one and can be described only as the individual store owner's philosophy on grocery store operation. This philosophy is partially a static one and partially a very dynamic one. The static part of the philosophy comes in not desiring to grow beyond a limit in physical size so that the store owner can keep a close watch over the business at all times. In other words, the store owner doesn't want to leave his present facilities or neighborhood. However, in direct contrast, the store owner and his helpers have done and will continue to do all that they can to get the maximum sales out of the present facilities. The store owner feels that he has done a good job with what he has and doesn't desire to expand in the future.

With these factors in mind, it is not hard to realize why this particular store owner keeps just enough records to satisfy the government for tax purposes. His formal records are kept on two sheets of a looseleaf notebook; and all his invoices are stored in a box at home. The rest of the business is carried on on a cash basis or is kept in the mind of the owner. The store owner has a good idea of the dollar volume of his sales and expenses over the past few years and makes mental comparisons when he figures out his income taxes at the end of the year.

As far as analysis of the business from formal records is concerned, this practice is almost non-existent. Most of

the changes are done on the basis of remembering the success or failure of a certain practice and not by keeping records on it. No calculation of ratios or comparison is done at all.

Store B

Store B is considerably larger than Store A both in sales volume and sales area. Store B has a sales area of 1,200 square feet and a gross sales for the year 1955 of a little over \$152,000.00.

Store B also has some peculiarities that bear on the mechanics of the record keeping operations and their use in store improvement. The greatest of these factors is the lack of organization and lack of application of principles of good record keeping and store management. These weak points come not from a lack of desire to progress on the part of the store owner but from a basic lack of knowledge of these subjects. In other words this store owner actually doesn't know how to help himself out of this situation.

An additional factor to be looked on here is that from 75 to 80 percent of Store B's business is done on a credit basis; thus making it necessary to keep a lot of additional records on the credit business.

Store B's records are kept in a series of note books and pads that are very complete with the data from the daily transaction but lose their meaning with a lack of organization

and overwhelming amount of detail. Sales records are not accurate on a monthly basis because the sales are recorded when paid for and not when the merchandise leaves the store. Cost of goods sold records are inaccurate also in that only a hasty annual inventory is taken and the cost of goods sold figure is not adjusted to compensate for inventory changes on a monthly basis. Expenses are not organized under the recognized accounting headings but are listed under the individuals to whom the bill was paid. The completion of a rather confused profit and loss statement was hampered by errors and the lack of some pertinent figures.

As is rather obvious at this point, any critical analysis of the business from these records would be practically impossible. About the only thing that the store owner does know is that his sales are up over last year. However, it must be pointed out here that the owner of Store B now realizes the need for a major revision of his record keeping system.

After a great deal of work in organizing Store B's records into approved form it was very obvious that several things were wrong with the business that could never be found using the Store B's existing record keeping system. These items will be pointed out later on in the analysis section of the thesis.

Store C

Store C is approximately the same size store as Store B.

The sales area of Store C is 1,100 square feet and the gross annual sales for 1955 was a little in excess of \$147,000.00.

About the only thing to be watched in Store C's case is that credit is offered and there may be some adjustments in the sales figures on a monthly basis. Another fact that must be considered, but only when looking at the future of the business, is that Store C's owner is planning to move to a new and larger location in the same neighborhood.

The owner of Store C uses the Accounting Corporation of America's "Mail-Me-Monday" record keeping system. He had all his records in a neat, concise folder that is kept handy for reference at all times. The store owner is very familiar with the records and can quote many of the pertinent figures and percentages from memory.

The "Mail-Me-Monday" setup is a very simple and adequate system for the small independent grocer to use. It is made up of these main parts: the operating statement, the balance sheet and a detail statement - all compiled on a monthly basis. The operating statement is the profit and loss statement, and the balance sheet is self-explanatory. The detail statement is a list of all of the individual transactions that the business made during the month. Both monthly and cumulative totals and percentages are calculated on the operative statements. This is a great help for the store owner when it comes to record analysis.

One of the best features of this system is the "Management Guide" that is sent out periodically with the records. This little pamphlet contains national averages, percentagewise, for sales and expense items for stores of comparable size. It also shows the store owner how to make the calculation of these percentages and how to compare his figures with the national averages to see how his business is doing. Thus the store owner can quickly and easily get a clear, concise picture of his business and compare it to other stores of similar size.

The store owner of Store C had very excellent records on all parts of his business except his sales. The only breakdown that he has for sales is on taxable and non-taxable sales. He says that he can't make a sales breakdown by product group because of his credit business. However, he may be losing sales in a particular department and not know about it. As will be seen later, there may be a way around this problem.

Store D

Store D is of comparable size with Stores B and C with a sales area of 1,600 square feet and an annual gross sales in excess of \$130,000.00.

Store D has only been in operation during the last six months of 1955 and to the present date. As is well known, in the first year or two of operation the profit picture is not

nearly as good as it is when the business gets on its feet. Thus, if one didn't know this fact and looked at Store D's records he would be sure that the store was loosing money and would be out of business in a short time.

There are several other factors that enter in here to help complicate the picture. First, the previous manager did a poor job of management of the store and left the present manager with a lot of bills to pay off. Secondly, when the store was opened, an extensive advertising campaign was put on that didn't give anything near the desired results. Lastly, the store manager, though young, full of ideas, and eager to learn, lacks an intimate knowledge of the retail food store business temporarily putting a stumbling block in the way of the store's progress.

Store D's owner has started off on the right foot in the record keeping department. He has an accountant keeping the store records and is receiving a good set of records. Sales are broken down by product group and the rest of the operating statement is presented in good order. All the information is kept in a master ledger and monthly profit and loss statements and balance sheets are prepared and sent to the owner.

A problem arises here in that there is very little done with these statements after they are completed. This can be attributed mostly to the fact that the store owner has not been trained in the use of record analysis in improving his business.

Starting with Store 8 and continuing through the rest of this preliminary discussion of the stores, it will be well for the reader to orient himself to stores that are larger in size than the first four. Also, our thoughts must be in terms of stores located in a larger metropolitan area with more growth potential in the immediate surroundings. The factor of size, in itself, can bring in many complications that the small store owner does not have to contend with.

The first of these complications stems from the fact that in the metropolitan areas the independent store owner faces more direct competition from the larger chain organizations than in the smaller communities. Thus, there is always a constant pressure for growth and expansion of the store in order to obtain the size and purchasing power to be able to compete successfully with the chains.

Secondly, consideration must be given to the high initial investment in stock, equipment and fixtures that the store owners must have in order to carry on business on such a large scale. In addition, it must be kept in mind that as the size of the store goes up there is a more than proportionate increase in expenses ratios - keeping the profit per item down and creating a constant pressure for higher sales volume. Also, along this line, the reader must think of the many extra services that are demanded by the hustle and bustle of metropolitan life and cut still deeper into the net profit of the business.

Last, but certainly not least, the labor-management, labor-public and management-public relations fields must not be forgotten. Today's higher labor bill, percentagewise puts even more pressure on the store owner. This pressure is toward both higher sales and more efficient utilization of labor in performing the store's functions. In connection with a discussion of labor, the problems of customer relation should be included. In a smaller store the store owner can make many more personal contacts than in a larger store. Thus the large store operator must depend on his help to keep up the customer good-will of the store. This whole complicated relationship adds immensely to the problems of an already over-worked store operator.

So, the reader has still another many sided complication, that of size, to keep in mind while the description of the store record-keeping systems is continued.

Store E

Store E has a sales area of 4,000 square feet and had a total gross sales in the year 1955 a little in excess of \$460,000.00.

Store E has a rather unique system of operation in that it is operated as a corporation by two brothers. In this situation the owners are actually employees of the corporation and are paid salaries. Naturally, the corporation profits are kept at as low a level as possible to avoid the

double taxation to which corporations are liable. There is also a rather unique system of rebates paid into the corporation by various groups to make up some of the profit picture. This all will be explained later on in the analysis section.

A two-fold complication peculiar to Store E is that the store has been in the same location for nearly fifty years and that the neighborhood is made up of an element that is not conducive to change. The fact of being in the same location for so long a period of time establishes certain practices and procedures that are time-honored and hard to change even if new and better practices are discovered to be more efficient. The neighborhood in itself helps to retard progress in that it is a low class, mixed element and expects little in the way of modern super-service techniques. This is not to say that the people of the community are backward. However, there is not the pressure for new things and new ideas that is often times exhibited in the more progressive neighborhoods.

Store E's record keeping system shows signs of both the old and new methods. A daily work sheet is prepared and daily sales records by department are kept and posted and monthly calculations are made up by an accountant. Also a complete yearly statement is made up and presented to the owners. However, there is a problem that enters in here.

The store owners have recently changed accountants and nobody seems to know just what is going on. The old accountant made a practice of not giving out information unless it was asked for and then giving it up rather begrudgingly. Thus, the store owners had very little information in formal records to use in analysis of the business. Now they are attempting to change that system; and with the help of this study they will go ahead and establish their new system.

The yearly statement, the only formal record that they had at the time of the interview, was a very complete statement with percentages calculated for all items on the profit and loss statement. The fault that is found here is that when this statement covers an entire year there is a possibility that trouble in various departments may go unrecognized for an unnecessarily long period of time and thus really hurt the profit picture of the firm. In addition to this, inventory is not taken at frequent enough intervals to make the cost of goods sold figure a meaningful one for analysis.

Another fact that may have bearing here is that the store owners do a lot of the business in their heads and depend a lot on experience to guide them through a given situation. There is a potentiality here for the use of educational material to supplement the practical experience to make better decisions in the operation of the business.

Store F

Store F has a sales area of 2,900 square feet and had a total gross sales for the year 1955 \$570,000.00.

There is very little that can be said concerning peculiarities affecting the store operation in the case of Store F. The one main thing that may have a tendency to cause trouble is that the business is geared so that the owner has a rather tight control of all of the operation of the store. This fact may tend to keep the store from running at full capacity. Another fact that enters in here is that the store is in a rather well-to-do neighborhood and in order to get customer satisfaction more care is needed in the small details and extra services that adds to the expense side of the ledger.

Store F's record keeping system is very complete and with a few modifications could be used with great success as a model for other stores. Complete daily records are kept and a monthly statement complete with ratios and percentages are presented to the store owner by his accountant. Also an inventory is taken every two weeks in the meat and produce departments and every six weeks in the grocery department. This is a great help in keeping the cost of goods sold figures as near to being accurate as possible.

The store owner keeps these records available at all times and is thoroughly familiar with them. He is very diligent in his study of the various operating ratios and reads

widely in the trade publications seeking information that will help him in improving his business. He also encourages his employees to do the same.

Store G

Store G has a sales area of 5,300 square feet and did a gross sales in the year 1955 in excess of \$610,000.00 in eight months of operation.

As is indicated by the above statement, Store G has been running for only a short time. Therefore, adjustment must be made in our thinking to allow for this as was done for Store D.

A second complication that enters into the discussion of Store G is the ownership arrangements. Store G is financed primarily by capital put up by a well-known wholesaler in the area. The arrangement is very complicated and can not be gone into in this paper. However, it is necessary to point out here that the store manager can, by paying a part of the profits of the business to the wholesaler, become the store owner over a period of time. So, we are not dealing with the chain type of setup, just merely a modified type of wholesaler-sponsored ownership plan.

The third difficulty in this case is that fact that originally the store records were kept by the wholesaler's accountants. Due to some tax difficulties that were very costly mistakes, the owner has changed to a local accountant

and is not yet in a position to do a thorough job of analysis from the new records. In comparing some of the new records quite a few differences were found that will have to be straightened out in the near future.

Both the old and new record keeping systems used by Store G are good ones with the main discrepancies being in tax accounting and depreciation funds. The profit and loss statement shows the sales and cost of goods sold broken down by product group and adjusted for inventory. The rest of the expense items were included in the usual fashion with a breakdown of wages by department included. Periodical and cumulative totals and percentages were listed for easy comparison. The balance sheet is presented in the regular form with an additional column for keeping track of the payment of the various notes that the store owner holds with the wholesaler. Stockturn, average weekly sales, gross profit by department and fees and freight by departments are also included on the statements.

Although this is a very good system and one that has practically all of the information that one could want, there is one serious drawback that very greatly hampers its value. The statements are for periods of varying length and thus the current period is not comparable with the previous or any other period because it is not composed of the same number of days of operation. However, the use of percentages for

comparison helps to ease this situation except for the seasonal bulges in expenses.

Store H

Store H has a sales area of 5,000 square feet and did a gross sales in the year 1955 of a little over \$1,500,000.00. As it is plain to see, this is the largest store in terms of sales volume.

There is very little unusual about Store H except that he has recently incorporated and the owner is actually an employee of the corporation. Thus, our thinking must be tempered toward the corporation outlook as in the case of Store E.

Another factor that we must consider is that Store E is located in a very wealthy neighborhood. In this area he can sell a lot of items that will bring a higher markup than in the case of Store S in the lower class neighborhood.

Store H has a very complete system of records that are kept partially by the store owner and partially by an accountant.

The profit and loss statement and balance sheets are presented in the correct form with a three month total breakdown of sales and gross profit by departments. Wages are also figured by departments and a daily customer count is taken. There is not too much that is out of the ordinary about these records and they would seem to be just an average

set of records to anyone who didn't know the owner of Store H.

To describe store H's owner could take almost a book in itself. He is a very intelligent man that is widely read in his field and had had many years of experience in the retail grocery. He spends a lot of his time going over his records and making comparisons - always with the aim of getting more sales and higher profit.

Before moving into the analysis section of the thesis, a pause to reemphasize the importance of considering the individual differences and peculiarities when making an analysis of a store's records is very important. In individual or group analysis, if the units or the conditions are not the same or if allowances are not made for these differences then the comparisons that are made are not valid ones. So, even though it will complicate matters considerably, the reader should take note of these individualities when reading the analysis.

Part II - Analysis of Record Keeping System

In this section on analysis of record keeping systems, the problem will be approached from two points of view. In the first part, comparison will be made of the individual stores' record keeping system to a two-fold standard described below to find out just what information they are giving to the store owners. In the second part, the stores will be compared to each other in a group type of analysis and with comparisons to national averages. Then notation will be made of how each store is progressing relative to the other stores of comparable size in the study.

The Standard

As was mentioned previously, this standard will be applicable at two levels or can be called a dual standard. The word dual here does not imply that some stores will be forced to meet more rigid tests than others of equal size. The distinction is drawn here between the larger and smaller stores because of the amount of detail needed and available in the two situations for a proper analysis is of necessity different. There are enough differences between the methods of operation in the two sizes of stores to warrant a standard by which to judge each one separately.

The component items of the standard come from the various phases of accepted accounting form and are brought together here to be used to make possible a complete analysis of

the individual store record keeping system. The first standard will be the one that applies to the smaller stores¹ and can be called the necessary or minimum standard. The second standard will apply to the larger stores² and can be called the ideal standard, for it goes into much more detail for the thorough analysis of the more complicated larger stores.

These standards will not involve any numerical computations. The objective of this part of the analysis is to take a critical look at the record keeping systems of the various stores and see how they compare to the standards that we have set up. The numerical computation will be done in the second part of the analysis where the individual stores are compared with the other stores of comparable size in the study.

The necessary or minimum standard

Following is an outline of the items considered by the writer to be necessary for a complete record analysis in the smaller stores:

1. Sales - A complete and accurate record should be kept of sales. Departmentalized sales records for the smaller stores are optional if size and relative value added warrant it. Taxable sales should be kept separate.

1. Less than \$250,000 in total gross annual sales
2. More than \$250,000 in total gross annual sales

2. Cost of Goods Sold - A complete record should be kept here also. Adjustment for inventory changes must be made for the period of the statement or the figure is meaningless. Departmentalization is optional and should follow the method of handling the sales figures.

3. Gross Margin - Should be included and the amount of detail will depend on how the sales and cost of goods sold figures are handled.

Expense Items³

4. Wages and Salaries - This figure will include all money paid to help in the store other than the owner. The owner's wage will be included in the net profit column.

5. Advertising - Includes all expenses for advertising. If a stamp plan is used, this should be listed separately as accurately as possible.

6. Delivery - For those smaller stores that offer delivery service, there should be included all expenses related to this operation.

7. Occupancy Expense - This includes all the expenses of occupying and using the store property.

8. All other Expenses - This is the miscellaneous category and includes all the rest of the expenses that do not fall into one of the previously mentioned categories.

3. The titles for these categories are taken from "Simplified Record Keeping for Food Retailers" Cooperative Extension Service, University of Mass. Amherst, Mass.

9. Total Expense - Total of all expense items.
10. Net Operating Profit - This is the amount that is left over when total expenses are subtracted from the Gross Margin. This is the return to the owner and to the business.

All of these figures should be kept on a monthly basis and should also be expressed as a percentage of total sales for the period. With these figures comparisons should be made with stores of comparable size by using local and national averages, to see how the particular store is doing in relation to the others. Cumulative totals should be kept to reflect the seasonal effects on business throughout the year. Comparisons should be made with the previous month's business to get the relationship with recent activity and comparisons also should be made the same month a year ago to get a consistent time comparison. Cumulative-to-date totals of the various items should be compared to the cumulative-to-date total of sales to reflect trends.

In addition to these comparisons there are three other ratios that will give the small store owner additional insight into his business. They are outlined as follows:

1. Sales per man hour - this figure is calculated by dividing the total sales for the period by the total number of hours worked in the store. When compared to national averages, this figure gives the store owner some idea of the labor efficiency.

2. Inventory Turnover - For the smaller store that doesn't departmentalize this figure can be calculated for the store as a whole. It is found by dividing the cost of goods sold figure by the average inventory value. This figure gives the store owner an idea of how fast his products are moving off his shelves.

3. Dollar Sales per Square Foot of Selling Space - This figure is calculated by dividing the total sales for the period by the total number of square feet of selling space in the store. It is usually calculated on a weekly basis. It is another good indicator of product movement and is used most effectively when sales are departmentalized.

Enclosed is an outline of the form for keeping records using the minimum or necessary standard.

The Ideal Standard

This standard contains the method that gives a complete analysis so necessary for the efficient operation of a large store. It is outlined as follows:

1. Sales - This is the total of all the sales made by the store for the period. The figures should be broken down by product groups - the breakdown is at the discretion of the store owner. Also taxable sales should be kept separately.

2. Cost of Goods Sold - A total figure for the store should be kept and also totals for the departments that are

TABLE V

Form For Record Keeping Using the Minimum or
Necessary Standard

PROFIT AND LOSS STATEMENT

GROCERY

FOR THE MONTH OF 19

	Dollar Amount	Percent of Sales
Sales		
Cost of Goods Sold		
Gross Margin		
Expense Items		
Wages and Salaries		
Advertising		
Delivery		
Occupancy Expense		
All other Expense		
Total Expense		
Net Operating Profit		

Sales Per Man Hour _____

Inventory Turnover _____

Dollar Sales Per Square Foot of Selling Space _____

at up under the **TABLE VI**. The figures also must be

**Form For Monthly Analysis of Figures Using the
Minimum or Necessary Standard**

3. **Form VI** - This figure is broken down

Department	Month	Percent of Sales	Cumulative to Date Totals Dollar Amount
Sales			

4. **Form VII** - This figure is a total figure kept for

Sales and also a figure for each department. This figure is the **Cost of Goods Sold** less the owner's compensation in order to

Gross Margin as per reporting this figure. However,

Expense Items are carried forward, as otherwise known as

Wages and Salaries

Salaries - Total is the total cost for the period of all **Advertising**

Delivery - Induced here are heat, light, water,

Occupancy Expenses and other related items.

All other Expenses for this figure are induced trapping

Total Expense paper bags, cash register tape, janitor sup-

Net Operating Profit these items of this type that are

used up for the operation of a store.

b. **Rental and Maintenance** - All expenses on the

keeping of the buildings and facilities. It also includes

rental services. Includes upkeep on delivery equipment.

c. **Advertising** - Total of all money spent on adver-

tising. These items can be carried as a separate item if

desired but should be included in the category.

Cumulative to Date Totals As Percent of Cumulative to Date Total Sales	Previous Month As a Percent of Sales	Same Month Month Dollar Amounts	National Averages Expressed As A Percent of Sales

set up under the sales category. The figure also must be adjusted for inventory changes.

3. Gross Margin - This figure should be broken down by department. It is an invaluable check on general departmental markup policy.

Expense Items

4. Wages - there should be a total figure kept for this item and also a figure for each department. This figure will not include the owner's compensation in order to develop a uniform policy for reporting this figure. However, if the owner has a drawing account, an allowance should be made for that.

5. Rent - This is the total cost for the period of all rented items.

6. Utilities - Included here are heat, light, water, electricity, telephone and other related items.

7. Supplies - For this figure are included wrapping paper, string, paper bags, cash register tape, janitor supplies, and all the various items of this type that are necessary for the operation of a store.

8. Repairs and Maintenance - All expenses on the upkeep of the buildings and facilities. It also includes janitor services. Excludes upkeep on delivery equipment.

9. Advertising - Total of all money spent on advertising. Stamp plans can be carried as a separate item if desired but should be included in the category.

10. Taxes - This includes all taxes except personal income taxes paid by the owner. There is an optional breakdown under this category of personal property and payroll taxes.

11. Licenses - includes any licenses necessary for the operation of the store.

12. Depreciation - Total of all depreciation for building and equipment with the exception of delivery equipment.

13. Bookkeeping - accounting and legal service.

14. Insurance - all insurance necessary for operation of store.

15. Bank Charges - service charges by the bank for handling of accounts.

16. Laundry - all expense of keeping necessary items laundered.

17. Fees and freight - cost of getting products to the store to sell them. Maybe broken down by department if desired.

18. Delivery Expense - All cost of delivering goods to the customers if this service is offered. Includes maintenance on equipment and allowance for depreciation of equipment.

19. Interest - all interest due on outstanding notes.

20. Sundry Expenses - all other expenses, includes cash short, dues and subscription, donations, bad check charges, etc.

21. Total Expenses - Total of all expenses.

22. Net Profit before Taxes - The amount left when total expenses are subtracted from gross margin.

23. Net Profit After Taxes - the preceding figure minus personal income taxes.

24. Other Income - all income from outside sources.

25. Total Net Profit - Net profit after taxes and other income.

These figures should be kept as monthly totals and expressed as a percentage of total gross sales. They also should be compared with stores of equal size and national averages to find out the individual store's position in relation to other stores of comparable size. Comparisons should be made with the previous month's business to get a relationship with recent activity. Figures from the same month a year ago should also be compared with to get a consistent time comparison. Cumulative totals should be kept of all the items to reflect the seasonal activity of the business. Cumulative-to-date totals of all the items should be compared to the cumulative-to-date total sales to reflect trends.

Departmental sales, cost of goods sold, and gross profit should be kept and expressed as percentages of their respective totals. Wages should be broken down by department and expressed as a percentage of the total wage bill. Fees and freight may also be broken down by department and expressed as a percentage of the total.

There are several other ratios that may be calculated to give the operator of the large store further insight into his business. They are outlined as follows:

1. Sales per man hour - This figure is calculated by dividing the total sales by the total number of hours worked. It may be calculated for the entire store or for each department as the operator wishes. This is an effective measure of labor efficiency.

2. Current Ratio - This figure is arrived at by dividing the current assets by the current liabilities. This is a measure of the current financial strength of the business.

3. Inventory Turnover - This figure is calculated by dividing the cost of goods sold by the value of the average inventory. In this case, it can be used for both the total store or for individual departments. Inventory turnover gives the store owner an idea of how fast his products are moving off his shelves.

4. Net Profit and Net Worth - By this figure the relationship between the amount of net profit of the period and the amount of money that the owner has invested in the business is shown.

5. Net Worth Turnover - To find this figure the total sales is divided by the net worth to find out how many times the owner's original capital has turned over during the period.

6. Percent Return on Investment - This figure is rather hard to calculate in the retail food store business due to the fact that store owners very seldom pay themselves a specific salary. The figure is the amount left from net profit after a fair return is given to the store owner. Thus, it is the amount returned to the business expressed as a percentage of the total investment in the business.

7. Net Sales per square foot of selling space - This figure is calculated by dividing the total net sales by the total number of square feet of selling space in the store, on a weekly basis. This also may be for each department which is a very good indicator of product movement.

Enclosed is an outline of the form for record keeping using the ideal standard.

TABLE VII

Form For Record Keeping Using the Ideal Standard

PROFIT AND LOSS STATEMENT

_____ GROCERY

FOR THE MONTH OF _____ 19____

	Dollar Amount	Percent of Sales
Sales		
Cost of Goods Sold		
Gross Margin		
Expense Items		
Wages		
Rent		
Utilities		
Supplies		
Repairs and Maintenance		
Advertising		
Taxes		
Licenses		
Depreciation		
Bookkeeping		
Insurance		
Bank Charges		
Laundry		
Fees and Freight		
Delivery Expense		
Interest		
Sundry Expenses		
Total Expense		
Net Profit before Taxes		
Net Profit after Taxes		
Other Income		
Total Net Profit		

TABLE VIII

TABLE VIII

**Form for Monthly Analysis of Figures Using the
Ideal Standard**

	Month	Dollar Sales	Percent of Sales	Cumulative Totals
January				
February				
March				
Total				

Next page

Sales	
Cost of Goods Sold	
Gross Margin	
Expense Items	
Wages	
Rent	
Utilities	
Supplies	
Repairs & Maintenance	
Advertising	
Taxes	
Licenses	
Depreciation	
Bookkeeping	
Insurance	
Bank Charges	
Laundry	
Fees and Freight	
Delivery Expense	
Interest	
Sundry Expenses	
Total Expense	
Net Profit Before Taxes	
Net Profit After Taxes	
Other Income	
Total Net Profit	

Pro-62
N-56
P-70-62
Q-61-67
R-66-69

3000 Par Mme ROBERT

Current Ratio _____

Cumulative to Date Totals as Percent of Cumulative to Date Total of Sales	Previous Month	Previous Month	Name	Same Month	Last Year	National Averages Expressed As a Percent of Sales
	Dollar Amount	Percent of Sales	Year	Year	Percent of Sales	of Sales

Additional Ratios for the Ideal Standard:

Sales	<u>Dollar Amount</u>	<u>Percent of Total</u>
Grocery		
Meat		
Produce		
Other		
Total		
Cost of Goods Sold	<u>Dollar Amount</u>	<u>Percent of Total</u>
Grocery		
Meat		
Produce		
Other		
Total		
Gross Margin	<u>Dollar Amount</u>	<u>Percent of Total</u>
Grocery		
Meat		
Produce		
Other		
Total		
Wages	<u>Dollar Amount</u>	<u>Percent of Total</u>
Grocery		
Meat		
Produce		
Other		
Total		
Fees and Freight	<u>Dollar Amount</u>	<u>Percent of Total</u>
Grocery		
Meat		
Produce		
Other		
Total		
Sales Per Man Hour		
Current Ratio		

Inventory Turnover

Grocery _____
Meats _____
Produce _____
Other _____
Total _____

Net Profit to Net Worth _____

Net Worth Turnover _____

Percent Return on Investment _____

Net Sales per square foot of Selling Space _____

As the reader has probably noticed, very little emphasis has been put on parts of the balance sheet as a tool of analysis of the business. While it is very true that many other ratios can be calculated from the data on the balance sheet, it is the feeling of the writer that they will not be as meaningful in the analysis of the business as the previously mentioned ratios. There is an almost endless number of calculations that can be made from all the data contained in store records; and it is the purpose of this paper to select the ones that are of the most value in analysis. However, the store owner may use any additional ratios that he desires in his analysis of his record keeping system.

Now that a standard has been set up to use in the analysis of the individual store record keeping system, this process should be carried out with relative ease. Stores A through D will be analyzed on the basis of the small store

standard and stores E through H will be analyzed on the basis of the large store standard.

Store A

In looking at Store A's records, it is found that they are kept on a monthly basis with yearly totals. They are not presented in approved accounting form; but rather they are kept on a single sheet in a loose leaf note book. Given below is a sample of one of these sheets.

Month	1955					
	Sales	Taxable Sales	Cost of Goods Sold	Taxes	Wages	Supply
January						

January

.

.

.

.

December

Totals

Repairs	Ice and Utilities	Rent	Insurance	Delivery	Total Expenses

As can be seen, this form is very simple, but can be of great value to the store owner if it is used in the proper manner. He can take these figures and, by applying the calculations recommended in the necessary standard, find out a great deal of information concerning his business.

In making a comparison between this form and our standard, it can be found that Store A's records contain all the necessary information for making out a good profit and loss statement. All the categories included in the necessary standard are kept here with more detailed sections in some cases. Some of these categories are handled in a different way from those in the standard and deserve mention at this time.

As is the practice in a lot of the smaller stores, store A offers a limited amount of credit to its customers. However, the thing that adds a bit of inaccuracy to Store A's reporting of total sales is that the credit sales are registered in the day's business when the account is paid and not when the merchandise leaves the store. Thus, there may be a carry over from one month's sales into the next that makes the second month look much better than the first.

The cost of goods sold figure is not adjusted for changes in inventory on a monthly basis. Therefore, there is a wide fluctuation in this figure, percentagewise, that makes it meaningless from the standpoint of analysis.

The wages and labor figure doesn't include the owner's compensation which is a good practice to follow.

The depreciation figure is kept separately and is not immediately available if the figure is wanted for analysis. None of the three additional ratios suggested in the standard are calculated by the owner of Store A. Also none of the formal comparisons with cumulative-to-date totals, the previous month, the same month last year or their respective percentages of total sales are done under this system. In addition, he does not make formal comparisons with local stores of comparable size or national averages.

This is the point where the usefulness of this form stops. It is used to satisfy the government for tax purposes and that is the end of it. The store owner is conscious of the fact that his total gross sales are going up all the time; but he has only a vague idea about his net profit. Store A's owner makes a few mental comparisons of the dollar figures for several items as time goes on. But, as far as calculating any percentages or ratios from this statement he does none of this at all. Thus, he is seriously hampered in seeing where his business is going in the future.

Store B

In attempting an analysis of Store B's record keeping system, it must be realized that this system is completely diverse from accepted accounting procedure. It is extremely

unorganized and is bogged down with unnecessary details. To set up an example of the forms used by Store B's system then would be practically impossible, so a brief description will of them will follow.

The main part of the records is kept in two note books - one for "daily paid outs" or money that has been spent by the store and one for sales, broken down into credit and cash sales. These note books go into a great amount of detail to name the person that has either made a credit purchase or received money for one purpose or another from the store. Monthly totals of these figures are made and kept separately on small pads. A scratch pad type of rough calculation is used to break the "expenses" down into categories that are not handled uniformly in the minor expense sections. At the end of all of this, a crude profit and loss statement is listed in the following manner:

	<u>Dollar Amount</u>
Sales	
less Cost of Goods Sold	
Expenses	
Labor	
Taxes	
License	
Net Profit	

Following is a list of the categories that are used for the "expense" item:

1. Rent	8. Taxes
2. Truck	9. Advertising
3. Miscellaneous	10. Repairs
4. Utilities	11. New Equipment
5. Supplies	12. Labor
6. Laundry	13. Depreciation
7. Insurance	

Thus, it can be seen that if some order is put to these figures, all the essentials of a good profit and loss statement are present. In addition to this, enough information can be pulled out of this jumbled mass to do a reasonably good job of analysis.

As was the case with Store A, some of the categories in the record forms are handled differently from what the approved accounting form dictates. So, it is appropriate to mention these differences at this time.

Store B does about eighty percent of its business on a credit basis and follows the policy of not marking down the sale bill till the money is received for it as did Store A. Thus there could be a tremendous variation in the sales on a monthly basis depending on when the bills were paid.

The cost of goods sold figures were not adjusted for inventory and were merely the amounts paid for stock coming into the store during the period.

There was a lack of uniformity in placing some of the smaller expense items between the miscellaneous and other

categories. They seemed to be placed wherever it was convenient to put them.

The depreciation figures were kept separate from the rest. As a matter of fact, the information had to be taken from the tax form.

The labor figures were only given as a yearly total and included part of the owner's compensation.

In addition, there were no calculations of percentages or ratios from the figures. This also means that the three additional ratios weren't calculated in this case. It also logically follows that the owner of Store B does not make formal comparisons with the cumulations-to-date totals, the previous month, the same month last year or any of the respective percentages of the totals thereof. In addition he does not formally compare his store with other stores of comparable size on a local or national basis. In truth, it would be almost impossible to make any calculations from the figures.

Store C

As was previously stated Store C's owner used the Accounting Corporation of America's "Mail-Me-Monday" retail food store record keeping system. This is an excellent system that includes almost all of the tools essential to do a good job of record analysis. Following is an outline of this system.

PROFIT AND LOSS STATEMENT

GROCERY

FOR THE MONTH OF 19

	Dollar Amount	Percent of Sales	Cumulative Total Sales	Percent of Cumulative Total Sales
Sales				
Cost of Goods Sold				
Gross Margin				
Expenses				
Rent				
Utilities				
Insurance				
Payroll Taxes				
Personal Property Taxes				
Depreciation				
Permits & licenses				
Interest				
Outside Labor				
Gross Wages				
Repairs & Maintenance				
Advertising				
Car & Delivery Expense				
Administrative Expense				
Other Expense				
Total Expenses				
Net Profit				

In addition to this form, there is a monthly balance sheet included giving a complete rundown in the financial position of the firm. Also this system includes a detailed statement listing all of the transactions made by the firm each month.

As was the case previously, there are several differences in handling the various categories in the profit and

loss statement that should be brought to the reader's attention.

The sales figures are given the following breakdown:

Taxable Sales
Non-Taxable Sales
Other Income
Total Sales

However, the sales are not listed by departments.

The cost of goods sold figure is adjusted for inventory changes by an approximation using the invoices. Thus, store C is the first store of the group considered so far in which the cost of goods sold figures on the monthly basis can be used as a meaningful figure.

Part of the owner's compensation is included in the gross wages figure thus distorting it a little bit.

In addition to this, a periodical "Management Guide" is included with the record forms that gives the store owner an opportunity to formally compare his store operation with the national averages of stores of comparable size.

As can be seen, the "Mail-Me-Monday" system gives the owner both the monthly totals and the cumulative-to-date totals of the various items. These figures are also expressed as a percentage of their respective total sales figures.

This form meets and surpasses the requirements of the minimum or necessary standard as far as the profit and loss statement is concerned. The comparisons to the previous month and to the same month last year are not included in this form as neither are the three supplementary ratios suggested

in our standard.

Thus, it can be seen that the owner of Store C has a good system that lacks only a few details to give him a complete and accurate analysis of his store operation. Upon close examination of the situation, the missing figures can be found or easily calculated and stated to complete the analysis.

Store D

Store D follows Store C fairly closely in that it has a well organized record keeping system; but differs from Store C in not possessing a formal accounting system or the amount of detail contained in Store C's records. Store D's owner has an accountant helping him with his records, but does not have as extensive a set of records as Store C's owner has.

Listed below is a copy of the form used by Store D's accountant in his profit and loss statement.

	Dollar Amount
Sales	
Cost of Goods Sold	
Gross Margin	
Expenses	
Supplies	
Salaries	
F.I.C.A.	
Unemployment	
Utilities	
Repairs	
Laundry	
Advertising	
Freight	
Trash Hauling	
Taxes and Licenses	
Miscellaneous	
Insurance	
Rent	
Stamps	
Audit	
Interest	
Equipment	
Depreciation	
Total Expenses	
Net Profit	

Store D has a practice that is unique from those practices used in the previous stores - it departmentalizes its sales figures. The sales figures are broken down into Grocery, Meats, Produce, Frozen Food and Total Sales.

The cost of goods sold figure is not adjusted for inventory changes on a monthly basis, thus, hampering analysis from this point of view.

Salaries include the proprietor's salary. The proprietor is actually for the present moment a hired manager for his brother who owns the store.

A balance sheet is included with the profit and loss statements that are usually given to the owner every three

months.

Store D's form will fit our standard for the profit and loss statement and that is the end of it. The percentage of the various departmental sales figures to total sales is not calculated as well as the percentage of the various other items in the profit and loss statement to the total sales figure. Cumulative-to-date totals and comparisons with the previous month and the same month last year along with their respective percentages of totals are not kept for formal analytical purposes. In addition to this, the three additional ratios of sales per man hour, inventory turnover, and dollar sales per square foot are not calculated. Also no formal comparisons are made with local stores of comparable size or with national averages.

Store E

In the analysis of the record systems for Stores E through H the ideal or large store standard will be used in making comparisons with the various stores. These stores are the larger stores in the study and must do a more thorough and accurate job of analysing their records in order to keep pace with the ever-tightening competition in today's retail food field.

Store E's record keeping system is in a rather disorganized condition at the present time. When the interviews were taken for this study, Store E had just changed account-

ants and no one seemed to know just exactly what was going on. Consequently none of the detailed monthly data was available to either the interviewer or the store owner. The previous accountant didn't release any of the monthly data, but rather published an annual statement of the situation of the business.

Store E is operated as a corporation and it must be kept in mind that this will have an effect on how the profits of this business are handled. The corporation is in reality operated at a loss, but at the end of the year this loss is more than covered up by a system of freight or delivery rebates. Thus the owners operate as employers of the corporation but keep the profits as low as possible to avoid the double taxing that corporate income must go through.

The record keeping system of Store E is a good system that is fairly complete with the desired details. Except for the fact that it is only given on an annual basis it is nearly adequate for the job. There is a complete profit and loss statement - an example of which will be shown below, a complete balance sheet and detail sheet listing the sales, cost of goods sold and gross profit by departments. Following is an example of the profit and loss statement.

	Annual Dollar Amount	Percent of Sales
Sales		
Cost of Goods Sold		
Gross Margin		
Expenses		
Repairs & Maintenance		
Advertising		
Bad Debts		
Administrative & Legal		
Miscellaneous		
Delivery		
Supplies		
Labor (includes owner's compensation)		
Rent		
Utilities		
Insurance		
Taxes and Licenses		
Interest		
Depreciation		
Total Expenses		
Net Profit before Rebates		
Rebates		
Net Profit		

A comparison of the profit and loss statement with that of the standard shows that the expense items laundry and fees and freight were left out but have doubtless been included elsewhere in the statement. Also the tax figures were not deducted from the net profit figures and other income was not added on. However, these are minor difficulties and do not seriously hamper the effectiveness of the statement for analytical purposes.

The condition that really does hamper the effectiveness of this statement is the fact that it is only given on a yearly basis. There is no comparison with the previous month or the same month last year or their respective percentages

to total sales. Neither can there be the calculation of cumulative-to-date totals or the comparison of cumulative-to-date totals to the cumulative-to-date total of sales. Also there is no formal comparison with other stores of similar size or national averages. When business is carried on with just an annual record, it is very easy for some expense to get far out of line without anyone knowing about it.

One very excellent calculation that Store E does make is on the sheet that breaks the sales down into Grocery, meats, produce, dairy, frozen food and notions and figures the cost of goods sold and the gross margin by departments with approximate percentages. This statement is a great help in attempting to localize the trouble in given departments. However, it could be even more effective if kept on a monthly basis.

None of the additional ratios are calculated in the case of Store E. Also wages are not broken down by product group.

The fees and freight breakdown is handled through a system of rebates to each department that shows up as a dividend for the department and helps make up the profit picture.

Store F

Store F has a well organized record keeping system that is complete and concise as far as it goes with the figures.

Following is an example of the profit and loss statement:

	Dollar Amount	Percent of Sales
Sales		
Cost of Goods Sold		
Gross Margin		
Expenses		
Labor		
Delivery		
Supplies		
Rent		
Utilities		
Insurance		
Interest		
Taxes and Licenses		
Repairs and Maintenance		
Advertising		
Miscellaneous		
Total Expenses		
Net Profit		

In comparing this statement with our standard, it is found that the expense items - Depreciation, Bookkeeping, Bank Charges, Laundry, and Fees and Freight are not included. The depreciation figure is calculated separately in this case but should be included with the profit and loss statement. The rest of these categories are doubtless included under other headings in the statement. Also the taxes are not deducted from the net income and other income is not added to make up the total net profit picture. All of these omissions are of a minor nature and do not hamper the effectiveness of the profit and loss statement as a tool of analysis.

Sales are departmentalized by grocery, meats, produce, other, and total. Cost of goods sold and gross margin are

figured by departments and along with sales are calculated as percentages of their respective totals.

As has been the case with most of the record keeping systems in this study, this is where the formal analysis stops. This is not to say, however, that additional analysis is not made mentally in some cases by the store owners.

Store F's owner makes no formal comparisons with the previous month's figures or the same month last year or their respective percentages of total sales. Also, he makes no formal comparisons with cumulative-to-date totals or with cumulative-to-date total sales or percentages of either. In addition, no formal comparisons are made with local or national averages of stores of comparable size.

Wages are not broken down by department and include part of the owner's compensation.

Fees and freight is also not broken down by departments and in fact is not included as a separate expense category.

None of the additional ratios recommended in the standard are calculated by the owner of Store F.

Store G

Store G's record keeping system is very complete and well organized. Below is an outline of Store G's profit and loss statement:

	Dollar Amount	Percent of Sales	Cumulative to-date Totals	Percent of Cumulative to-date to Cumulative to-date Total Sales
Sales				
Cost of Goods Sold				
Gross Margin				
Expenses				
Wages ^a				
Rent				
Utilities				
Store Supplies				
Repairs and Maintenance				
Advertising				
Taxes Payroll				
Taxes - Property				
Licenses				
Depreciation				
Bookkeeping				
Insurance				
Bank Charges				
Laundry				
Sundry Expenses				
Ohio Sales Tax				
Cigarette Tax				
Stamp Plan				
Fixture Rental				
Fees and Freight				
Commission Freight				
Sales				
Cash Short				
Total Expense				
Operating Profit				

^adoesn't include owner's compensation

As can be seen by comparison with our standard Store O's profit and loss statement contains all of the necessary items with the exception of the deduction of taxes from net profit and the addition of other income. However, these points are of minor importance and do not hamper the effectiveness of the statement for analytical purposes at all.

However, there is no formal expression of the comparison to the previous month or the same month last year or their respective percentages of totals. Also, there is no comparisons with local stores of comparable size or national averages.

Sales are broken down into grocery, meat, produce, and total sales. The respective cost of goods and gross margin figures are calculated for each department. The cost of goods figure is adjusted for inventory charges on a periodical basis.

In addition to these, an allowance for the owner's draw is listed separately from the labor bill.

Wages are broken down by departments and expressed as a percentage of department and total sales.

Fees and freight are also broken down by departments and expressed as a percentage of the department and total sales.

Inventory turnover is listed by product groups along with average weekly sales figures for the period.

A separate record is also kept of the payments made on the notes held by the wholesaler on the store.

Sales per man hour, current ratio, net profit to net worth, net worth turnover, percent return on investment, and net sales per square foot of selling space are not calculated in the case of Store O.

There is one drawback that seriously complicates matters. The time periods are of unequal length making the periods uncomparable. It also causes considerable trouble in the calculation of taxes and depreciation rates.

Another fact to be considered here is that Store G is a new store and hasn't had time to get the proper system set up yet.

Store H

Store H has a very excellent record keeping system that is kept on a monthly basis with a three-month sales breakdown by product group showing cost of goods sold - adjusted for inventory changes - and gross profit by department.

Following is an outline of the profit and loss statement:

	Dollar Amount	Percent of Sales
Sales		
Cost of Goods Sold		
Gross Margin		
Less Expenses		
Wages and Salaries*		
Travel Expenses		
Telephone		
Office Supplies		
Heat, light and water		
Supplies		
Rent Expense		
Advertising		
Tremont trading stamps		
Taxes		
Interest		
Maintenance of equipment		
Janitor Service		
Dues and subscriptions		
Legal and accounting		
Donations		
Insurance		
Miscellaneous		
Depreciation		
Entertainment		
Auto Expense		
Laundry Expense		
Total Expenses		
Net Profit		

*Includes part of owner's salary

As a comparison with the standard shows, this profit and loss statement only falls down by not including the tax deductions from net profit and the inclusion of other income. As was stated previously, these are minor points and have no effect on the quality of the statement as a tool of analysis.

However, there is no formal statement of the calculation of cumulative-to-date totals or the comparison of cumulative-to-date total sales. Also there is no statement of the previous month's business or of the same month last

year and their respective percentages of total sales. In addition, there is no formal statement of comparison with local stores of comparable size or national averages.

Wages are broken down by department and expressed as a percentage of total sales.

Sales, cost of goods sold, and gross margin are broken down by month into groceries, meats, produce, frozen food, other, and total.

Fees and freight are not broken down by product group.

Sales per man hour, current rates, net profit to net worth, percent return on investment, and net sales per square foot of selling space are not calculated in this case.

Part II - Group Analysis

The purpose of this group analysis is twofold in nature. It serves to make comparisons of the various stores of comparable size in the study and to make comparisons with these stores to the national averages. With this approach a relative picture can be gotten of how all of the stores in the study are progressing.

The categories for the expense items in the profit and loss statements are governed by the categories for the Accounting Corporations of America's "Mail-Me-Monday" Management Guide. The profit and loss statement comparisons will be made at three different levels: (1) the comparison of one store to the national averages at the \$50,000 to

\$1000,000 level of gross annual sales (2) the comparison of three stores with each other and the national averages at the \$100,000 to \$200,000 level of gross annual sales and (3) the comparison of four stores with each other and the national averages at the \$500,000 and over level of gross annual sales. All analysis will be done on an annual basis unless otherwise stated due to the extreme variation in activity of the various stores during the individual months.

The comparison by use of the additional operating ratios will be made at two levels corresponding those of the standards previously set up. There is a problem that enters in at this point. Especially in the case of the smaller stores, there is a definite lack of figures for accurate comparison of these operating ratios. Thus, the analysis is hampered by having to take figures that apply to stores of larger sales volumes and trying to adjust them to fit the conditions of the smaller stores. With these conditions valid comparisons can be made between the stores in the study; but the use of national averages must be tempered to take these inadequacies into account.

The first section of group comparison will be made with the stores used under the small store standard of Stores A through D. Following is a listing and discussion of the first two levels of profit and loss statements:

TABLE IX

Profit and Loss Statement for Store A and National
Averages With Figures Expressed as a Percentage of
Total Sales, Ohio, 1955

	Store A	National Averages*
Sales	100.00	100.00
Cost of Goods Sold	83.30	84.39
Gross Margin	16.70	15.61
Expense Items		
Operating Supplies	.88	.48
Wages**	4.07	3.85
Repairs and Maintenance	.07	.30
Advertising	.48	.46
Delivery	.17	.31
Bad Debts	--	.02
Administration and Legal	--	.34
Miscellaneous	.60	.60
Rent	.55	1.30
Utilities	1.08	1.07
Insurance	.15	.35
Business Taxes and Licenses	--	.76
Interest	--	.13
Depreciation	.51	.76
Total Expenses	8.55	10.72
Net Profit	8.15	4.89

* Source: Management Guide, Food Store Operators, January 1, 1955 to October 1, 1955, Accounting Corporation of America.

**Includes gross wages and outside labor

In the comparison of Store A to the national averages at the \$50,000 to \$100,000 level, Store A is doing better than the national averages. The cost of goods sold figure for Store A is 1.09 percentage points less than the average and thus makes the gross margin 1.09 percentage points higher. Those expense items that are significantly above the national averages are the operating supplies and wages. The other items are either practically the same or lower than the

values in the national averages. Total expenses are 2.17 percentage points lower than the average and net profit is 3.25 percentage points higher. Thus it is obvious Store A has combined efficient buying practices and diligent expense cutting to move himself to a favorable position in relation to the national averages for comparable size stores.

TABLE X

Profit and Loss Statements for Stores B, C, and D
and National Averages With Figures Expressed as a
Percentage of Total Sales, Ohio, 1955

	Store B	Store C	Store D	National Averages*
Sales	100.00	100.00	100.00	100.00
Cost of Goods Sold	87.08	87.02	88.81	85.56
Gross Margin	12.92	12.99	11.19	14.44
Expense Items				
Operating Supplies	.47	.68	.93	.46
Wages**	3.79***4.09		7.79-	4.25
Repairs and Maintenance	.54	.34	.68	.34
Advertising	.47	.72	.93	.57
Delivery	.51	.21	--	.24
Bad Debts	--	--	--	.03
Administration and Legal	--	.41	.13	.20
Miscellaneous	1.46	.10	.79	.74
Rent	.58	.60	.74	1.00
Utilities	.66	.83	.60	.90
Insurance	.32	.20	.24	.25
Business Taxes and Licenses	.14	.34	--	.65
Interest	--	.20	.12	.13
Depreciation	.56	.70	.71	.65
Total Expenses	9.50	9.41	13.66	10.41
Net Profit	3.42	3.58	-2.47	4.03

* Source: "Management Guide," Food Store Operators, January 1, 1955 to October 1, 1955, Accounting Corporation of America.

** Includes Gross Wages and Outside Labor

***Includes part of owner's compensation

- Includes all of manager's compensation

○ Includes a charge for laundry and new equipment

In making comparisons with Stores B, C, and D to the national averages at the \$100,000 to \$200,000 level it can be seen that all of the stores have cost of goods sold figures that are higher than the national averages. Store D had the highest cost of goods sold figure and consequently the lowest gross margin of the three stores. Store D also has the highest expense total and is the only store of the three to be over the national averages in this case. All of the net profit figures are below the national averages with Store D again having the lowest and also being in minus numbers.

Store D's condition can partially be explained by the fact that it is a new store just starting into operation and thus needing a build-up of inventory and supplies that makes the cost of goods sold, gross margin, and the operating supplies figures look bad. However, the cost of goods sold figure is not adjusted for inventory changes thus throwing it and the gross margin figure out of balance. The problem that enters into the comparison here is that in the national averages the cost of goods sold figure is adjusted for inventory changes and it is not in Store D's case. If Store D followed the policy of making an adjustment for inventory changes in its cost of goods sold figure, there is a possibility that the two figures may be closer together. Also the wages figure of Store D included the manager's salary and the wage figures do not for the rest of the stores.

In the other two stores the only expense figure that is out of line to a great degree is the miscellaneous category for Store B. It is almost double the value of the national average figures. This may be easily explained due to the fact that several expense items that are not included in the categories for the national averages are included in the miscellaneous category in Store B's case.

Thus, the main problem with these three stores rests in them not being able to buy at low enough rates or not getting proper mark-up in all of the products they sell or both. If the gross margin for these three stores was in line with the national averages they could be making more than the average net profits. Store D may also be able to do this when it reaches a normal status of operation.

To follow up this comparison of profit and loss statements the reader's attention is called to three additional operating ratios of Stores A through D as compared with national averages.

TABLE XI

Sales per Man Hour, Four Selected Ohio Retail Food Stores and National Average, Total Stores Basis, 1955

<u>Store</u>	<u>Sales per Man Hour</u>
A	\$ 9.67
B	14.56
C	14.45
D	12.74
National Average*	20.15

*Source: Super Market Industry Speaks - 1956

A comparison of Stores A through D with the national average shows that they are all below it. However, as was mentioned previously this average is for stores that have a much larger total sales volume than these stores. There are no averages worked out for stores this small in size. If one stops and considers the problem, it is plain to see that in the larger stores the personnel have more facilities and selling potential than do the smaller stores. Thus, it would be expected that the sales per man hour to be lower in the smaller stores as it is in this case. In other words, the owner of the smaller stores and his help have to work harder to get the same dollar amount of sales as the help in a larger store.

TABLE XII

Inventory Turnover, Four Selected Ohio Retail Food Stores and National Average, Total Store Basis, 1955

<u>Stores</u>	<u>Inventory Turnover</u>
A	17.02
B	20.79
C	18.23
D	10.44
National Average*	21

*Source: Super Market Industry Speaks - 1956

Again, by comparing the figures for the Stores A through D to the national averages one can find that they are all below the mark. This is easily explainable due to the fact that the smaller stores have a smaller gross sales and thus while they must carry a relatively large inventory

to cover the wide number of items available in a grocery store today they have a slower turnover than the larger stores. In other words, the smaller stores owner keeps products on his shelf a longer time than the large retailer. There is a direct correlation between high sales volume and high rate of turnover.

Another fact deserves to be mentioned at this time. Inventory turnover on a total store basis can be used as an indicator of how fast the products are moving off the shelves. However, to get down to the movement of specific items is a job that must be covered either by breaking the turnover figures down by departments or by using specific space allocation studies. Inventory turnover on the whole store basis can be used as a general indicator and more detailed steps may be taken to localize the source of the trouble.

TABLE XIII

Dollar Sales per Square Foot of Selling Space, Four Selected Ohio Retail Food Stores and National Average, Weekly Basis, 1955

<u>Store</u>	<u>Dollar Sales Per Square Foot of Selling Space</u>
A	\$2.51
B	2.44
C	2.50
D	1.57
National Average*	2.27

*Source: "Operating Results of Food Chains in 1955"
Harvard Bureau of Business Research

In this case, three of the stores, Stores A, B, and C

are above the national average and one store, Store D, is below it. As was stated before, the average is for larger chain stores and our thinking must be modified to take this into account. One would expect the smaller stores to have a higher dollar sales per square foot of selling space because they don't have all of the excess aisle space and freedom of movement that is found in the larger stores. The larger stores have a lot of space devoted to the free movement of the flow of traffic that the smaller stores don't have.

To continue our group analysis, our point of view must change from the stores covered by the necessary or minimum standard to those covered by the ideal standard. As was stated previously, the ideal standard would be used in the comparison of stores that had a total annual sales volume of more than \$250,000.00 or the larger stores in the study. This section will cover Stores E through H; and profit and loss statement comparisons will be made with national averages of the \$500,000 and over level of gross annual sales. The analysis will proceed in the same manner as it did in the preceding section, taking the profit and loss comparison first and then looking at the additional operating ratios.

TABLE XIV

Profit and Loss Statements for Stores E, F, G, and H and National Averages with Figures Expressed as a Percentage of Total Sales, Ohio, 1955

	Store E	Store F	Store G	Store H	National Averages*
Sales	100.00	100.00	100.00	100.00	100.00
Cost of Goods Sold	85.58	82.06	84.58	81.99	84.47
Gross Margin	14.42	17.94	15.42	18.01	15.53
Expense Items					
Wages and Salaries**	9.81	8.21	6.78	7.27	6.43
Repairs & Maintenance	.44	.41	.05	.26	.30
Operating Supplies	.62	.52	1.21	.47	.69
Advertising	2.49	1.04	2.58	1.82	1.01
Delivery	.21	.37	--	.09	.06
Bad Debts	.01	--	--	--	.01
Administration & Legal	.27	--	.08	.06	.56
Miscellaneous	.95	.84	2.30	.85	.22
Rent	.57	.84	1.58	.54	1.08
Utilities	.57	.57	.63	.46	.42
Insurance	.49	.23	.45	.27	.25
Interest	.39	.65	.35	.31	.49
Depreciation	.83	--	.33	.68	.60
Total Expenses	17.73	14.01	16.34	13.07	12.17
Net Profit	.48	3.93	-.92	4.94	3.58

* Source: "Mail-Me-Monday Bookkeeping and Tax Method," Accounting Corporation of America, San Diego, California
** Includes outside labor
○ Includes owner's compensation
- Is a corporation and receives freight rebates by department that covers the loss and yields a small profit
Includes part of the owner's compensation
~~ Does not include owner's compensation

In analysing the profit and loss statement of these four stores there is an important point to be made about two of them that greatly effects the analysis of their statements. In case of Store E, it is operated as a corporation and will thus have a different profit picture than the other stores. The stores in the study that are not operated as corporations

include the owner's compensation or part of it in the net profit figure. However, Store E's owner's compensation is included in the wages and salaries category thus making the net profit look smaller in comparison to the others. Store G has just been in operation a short period of time and has not yet reached the optimum point of operation and thus will not look as good as the other stores as far as profit is concerned.

Looking at the cost of goods sold figures for the four stores, it can be seen that Store E is the only one that is enough above the average to be considered in analysis and consequently below the average in gross margin. The number of percentage points that Store G is above the average is small enough to be accounted for by an error in reporting the figures and thus will not be considered here. Store E's total expense is also higher than the average which can be explained mainly by the inclusion of the owner's compensation in the wages and salaries category and the addition of a stamp plan in the advertising section. A system of freight rebates actually serves to push up the gross margin figure and cover the expenses to yield a small net profit to the corporation.

Stores F and H are well above the average in the gross margin category and even though their total expenses are higher than the average; the gross margins are enough higher to yield a better than average net profit. Store F's

expenses are high due chiefly to the inclusion of part of the owner's compensation in the wages and salaries category; and Store H's expenses are higher due to the inclusion of a stamp plan in the advertising category. The success of these stores can be attributed mainly to the managing skill of their respective operators. Both owners are intelligent men and good retail grocers.

Store G is practically the same as the national average in the cost of goods sold and gross margin category. However, the total expense category is where Store G is out of line. In Store G's case the advertising expense is higher than average due to the inclusion of a stamp plan and extra promotion at the opening of the store. The miscellaneous category is high due to the inclusion of several items that are not listed among the expense categories for the national average. The rent is high because the figure includes some rented fixtures as well as the rent for the building.

To complete the group analysis section under the ideal standard, the list of additional operating ratios will be examined. In addition, a discussion of departmentalized sales, gross profit and cost of goods sold will be included.

TABLE XV

Sales per Man Hour, Four Selected Ohio Retail Food Stores and National Average, 1955

<u>Store</u>	<u>Sales per Man Hour</u>
E	\$17.73
F	-----
G	15.56
H	-----
National Averages*	20.15

*Source: "Super Market Industry Speaks - 1956

The comparison of Stores E through G with the national averages shows that of the two stores where the figures are available both are under the national average. This figure was found by asking the store owner how many hours were worked in his store during a week. If he could not answer while the interviewer was present, then no figure was reported for that particular store. This fact will explain the absence of these figures from the two most progressive stores in the group.

Store E is below the average but has a problem in low sales for the area and facilities in the store. The help in Store E are not too aggressive and until recently the fixtures were rather outdated - thus adding to the problem. However, with those changes in facilities and the addition of a little more attention to employee sales attitude by the owners this figure should rise in the future.

Store G is also below the average, but this can be explained by the fact that Store G has been in operation only a short time and has not yet fully developed its potential as far as total sales is concerned.

TABLE XVI

Current Ratios, Four Selected Ohio Retail Food Stores and Accepted Standard, 1955

<u>Store</u>	<u>Current Ratio</u>
E	1.96*
F	--
G	.72**
H	13.22†
Accepted Standard	2.00

* For the year 1955

** as of 12-31-1955

† as of 6-30-1956

As can be seen by comparing these figures on current ratio, Store H is well above the standard and Stores E and G are below it with Store G being in the lowest position. This figure is not reported for Store F because no balance sheet was available for this store. Store E is almost up to the accepted standard and has little to worry about. Store G is renting its fixtures and is in debt for some of its inventory of stock yet. It has not had enough time to get itself into a solid financial position. Store H is well above the accepted standard in this case and should have no trouble as far as current ratio is concerned.

TABLE XVII

Inventory Turnover, Four Selected Ohio Retail Stores and National Average, Whole Store Basis, 1955

<u>Store</u>	<u>Inventory Turnover</u>
E	13.15
F	18.72
G	20.36
H	37.38
National Average	21.0

Source: Super Market Industry - 1956

The only store that is really in trouble in this case is Store E. Store E is not getting its inventory to turn-over enough times within a given period. Thus, it is not fully developing its sales potential for the facilities that are available. Stores F and G are near enough to the average to not be in danger and Store H is high above it. As was indicated previously, Store E is having some trouble with low sales. This indicator serves to help substantiate this view on the subject. Inventory Turnover on a whole store basis which has been discussed previously can only tell us that there is a difficulty. A more specific type of analysis must be made to locate the problem area.

TABLE XVIII

Net Profit to Net Worth, Four Selected Ohio Retail Food Stores and National Averages - 1955

<u>Store</u>	<u>Net Profit to Net Worth</u>
E	,008
F	---
G	.50
H	.71
National Average	---

In this case no national average is available for use in the analysis. This makes comparison on a country wide basis impossible. Stores H and G are in a better position than Store E because a higher ratio should be more desirable but how much cannot be told without figures for comparison. Store F's figure is not available because no balance sheet is available.

TABLE XIX

Net Worth Turnover, Four Selected Ohio Retail Food Stores and National Average, 1955

<u>Store</u>	<u>Net Worth Turnover</u>
E	10.35
F	---
G	---
H	14.29
National Average	---

As in the previous case, no national average is available for the net worth turnover figure. Logically, the more rapid the net worth turnover is the better position the store is in. This would put Store H in a better financial position than Store E which, as has been brought out in the previous discussion, probably is the case.

TABLE XX

Dollar Sales per Square Foot of Selling Space, Four Selected Ohio Retail Food Stores and National Average, Weekly Basis, 1955

<u>Store</u>	<u>Dollar per Square Foot of Selling Space</u>
E	\$2.22
F	3.76
G	3.29
H	5.45
National Average*	2.27

* "Operating Results of Food Chains in 1955"
Harvard Bureau of Business Research

These figures help to complete the case that Store E is not developing its full potential from the sales point of view. This is not to imply that any store that is below the

national average should consider that they have a weak point in their business operation. This means that in addition to the figures being low, the other ratios have pointed to the fact that there may be a weakness in Store E's sales procedure in that he is not fully developing his potential.

TABLE XXI

Sales, Cost of Goods Sold, and Gross Margin,
Departmentalized and Expressed As a Percentage
of the Total, and National Averages for Sales
Only, Four Selected Ohio Retail Food Stores, 1955

<u>Sales</u>	<u>Store E</u>	<u>Store F</u>	<u>Store G</u>	<u>Store H*</u>	<u>National Average**</u>
Grocery	62.94	48.94	63.94	---	56.06
Meat	29.16	38.44	27.87	---	34.29
Produce	7.90	12.52	8.19	---	9.65
	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>	<u>---</u>	<u>100.00</u>

Cost of Goods Sold

Grocery	64.61	62.30	64.01	---	---
Meat	27.60	38.69	28.63	---	---
Produce	7.59	9.01	7.36	---	---
	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>	<u>---</u>	<u>---</u>

Gross Margin

Grocery	53.03	33.54	63.57	---	---
Meat	37.23	37.29	25.74	---	---
Produce	9.74	29.17	12.75	---	---
	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>	<u>---</u>	<u>---</u>

*Departmentalized figures for total year not available

**Source: "Mail-Me-Monday" Accounting Corporation of America

In this case, only partial figures were available for Store H for the year 1955 so the figures were omitted entirely. The national averages for cost of goods sold and gross margin were not figured as a percentage of the total

and thus are not comparable to the figures used here.

This table is a very effective tool for pointing out major faults in the basic policies of store operations. By comparing the performance of the various departments, information can be obtained as to specific areas in which trouble may or may not lie. By the same token, it also seems to tell the store owner when he is doing well.

In the sales section, it will be noted that Stores E and G are above the averages in percent of total sales in the grocery department and below in the meat and produce departments. This can be a sign of some difficulty. It is a well known fact that the produce and meat departments, especially produce, carry a higher markup and consequently a higher margin on every sales dollar. The Food Town Study⁴ showed that the produce departments of the stores tested while doing thirteen percent of the total sales volume accounted for eighteen percent of the profit. In the same study the meat departments of these stores almost held their own in share of profit in relation to percent of total sales done by the department. However, it is a well known fact that the meat department is a good traffic puller and helps to hold up the total sales volume of the store. Thus, if the grocer is able to improve his meat and produce departments sales in relation to the grocery department sales, he

4. Progressive Grocer's, Food Town Study, 221 North La Salle, Chicago 1, Illinois

is putting himself in line for a higher percentage profit on each sales dollar. Store F's owner has succeeded in doing this and as the profit and loss statement points out is doing better than Store E and G.

The figures in the cost of goods sold section serve to substantiate the case the previous section has started. The cost of goods figures for Stores E and G are higher in the grocery department and lower in the produce and meat departments than that of Store F. This would obviously point to less total gross margin in the two departments that will give a higher percentage gross margin per sales dollar. If the cost of goods figures were higher percentagewise for meat and produce, it would mean that more of these items were being bought for sale and thus creating the possibility for a higher total gross margin.

It is not the idea here to create the impression that the grocer should have a very high percentage of his sales in the meat and produce departments. However, it must be pointed out that these two departments should be kept in balance, sales wise, with the grocery department so that some of the low profit items that must be carried in the grocery department can be offset by some of the high profit items in the other two departments in order to return a reasonable rate of profit to the store as a whole.

The gross margin figures serve to seal the argument.

Store F gets 66.46 percent of its total gross margin from meat and produce while Store E gets only 46.97 percent and Store G 36.49 percent. This serves to point out that Store F has a better balance between the various departments that in turn returns a better profit for the store as a whole.

This section serves to point out the importance of departmentalizing the sales, cost of goods and gross margin sections. A store may be missing out on quite a big sales potential and not even know it.

Part IV - Conclusions and Recommendations

The purpose of this section of the thesis is to bring together from the other sections the weak points in the various store record keeping systems and to make some recommendations as to what to do to overcome these difficulties.

Store A

Store A's record keeping system is adequate from the point of having all of the dollar figures for the various categories. The store is not departmentalized because it is too small to do so. The problem here is two fold in nature. First, the degree of minuteness of detail used in the analysis must be determined; and secondly, the number of comparisons that should be made must be decided on. A store the size of Store A does not need all of the detailed analysis that the larger stores in the group need. However, the

owner of Store A must be able to get an idea of where his business is going in the future from the analysis of his records.

Store B

Store B has a two-sided major problem. First, the present record keeping system is not in the proper form to give the owner pertinent data concerning the present operation of the store. Secondly, without the data on the present condition of the store it is impossible to use the system suggested in the standard to try to improve store operations in the future. Therefore, the attempt must be made to give the owner of Store B the information that will help him find the weaknesses in his store operation and to help him improve these weaknesses in the future.

Store C

Store C has a well organized record keeping system that has two weaknesses that may have a major effect on the value of the system for analytical purposes. First the sales, cost of goods sold or gross margin figures are not departmentalized. For a store this size, this practice leaves room for trouble to develop in a particular department and to go unnoticed for a long period of time. Secondly, Store C's system only partially carries out the ratio analysis that is a guide to store improvement in the future. So, in this case, the owner of store C should departmentalize and carry his system further in analysis to get all of the benefit of it for future improvements of the store.

Store D

There is one main problem that presents itself in the case of Store D. That is that the owner of Store D does not carry his record keeping system beyond the collection of figures on the present operation of the store. There is no analysis of the statements to find ways of improving the store operation in the future. The application of the system of analysis recommended in the standard should give the owner of Store D all of the information he needs to correct the problems that exist and will exist in the future of his store. An additional minor problem that appears here is the fact that Store D must settle down into a definite pattern of operation when the proper sales volume has been reached. This will take some time yet due to Store D's only being in operation for a little over a year now.

Store E

There are several things that the owners of Store E must do to make their record keeping system come up to the standard. First and foremost, they must get organized with their new accountant and decide just what kind of statements that they want and the amount of detail to be contained in each one. Secondly, they must realize that with a business the size of Store E a monthly type of analysis is indispensable. Third, they must realize that the statements they receive from their accountant have use beyond reporting the activity in past periods. They must learn to use the tools

of the standard to help them in finding places to improve their business in the future. Finally, they must realize that some very real problems exist at the present moment that demand immediate attention. The application of the system recommended in the standard and clear, effective thinking on the part of the store owners should solve the problems in time with a minimum of effort.

Store F

The main problem in the case of Store F is in the fact that the excellent operating statements that are presented to the owner are not used in formal analysis of the situation to improve the store operation. With the application of the form indicated in the standard this problem should be solved with very little trouble.

Another two-fold problem enters in here in a minor way. No balance sheet is prepared for the organization and the depreciation is only figured on an annual basis. However, this situation could be easily rectified if condition warranted it.

Store G

Store G faces several problems in its attempt to arrive at a record keeping system that will match the standard. First, it must run out the period of initial growth and arrive at a system of operation that will be stable in return rather than sales volume. Secondly, store G must get its

new accountant to set up the best method of handling the statements that will insure the inclusion of uniform time periods for these statements. Also, the new form must be improved to include all of the pertinent data as the old one did. Finally, the owner of Store G must apply the ratio analysis suggested in the standard to give himself a picture of the specific weaknesses to be solved to improve store operations in the future.

Store H

The problem that Store H faces is one of not carrying out the ratio analysis as far as is recommended by the standard. Store H has an excellent system that falls down only in this one case. The owner of Store H has good foresight but will be aided immensely by this ratio analysis when he looks for plans to improve his business in future years.

As a final note in this thesis, it would be well to point up some recommendations for store record keeping systems in general. This section will bring out a number of major points that must be brought to the attention of the food retailers in the near future, if they do not know them already, in order for them to be able to keep their position in terms of share of the market and rate of profit.

The first point to be made here is that food retailers must learn to go into more detail in their analysis of their records. This does not mean that the store owners must spend many more hours in working with their records. This means

that he must, by the means of comparisons and ratios, go deeper into records of the business activity and try to find all possible ways to cut cost and increase sales volume in order to assure a maximum profit from the given facilities.

A point of ~~cost~~^{causa} may well be interjected here. The mention of maximizing profit must not carry the connotation of increasing the cost of food to the consumer without giving her some additional service or value for her money. An important part can be played in the spreading of margins by emphasis on the reduction of ~~spoilage~~ loss in the various stores. The process of keeping records on spoilage loss may well pay big dividends in increasing the net profit to the firm.

In addition to this, the food retailer must use his records more as a tool for planning. In other words, he must be able to project the figures from the records to get some idea of where the business will be in the future.

This fact substantiates the need for a simple but critical method of analysis of records. The form must not be too time consuming in detail but must be able to tell the store operator, quickly, effectively, and economically, just where his strengths and weaknesses are. The system proposed in this thesis is designed to do this.

All this work in analysis would be wasted if these recommendations for changes to improve the store operation

were not followed through and put into action. In other words, the store owners must take the findings of the analysis and make changes to improve the weaknesses and try to keep taking advantage of the strengths of the business.

Following in line with this, comparisons must be made with stores of comparable sales volume and national averages to get a picture of how the individual store operator matches up with the rest of the stores its own size. This is not to say that the retailers should strive to meet the average and no more. These national averages should be used as guide posts and indicators of trouble if the store is too far out of line with them. They merely will show how good the average is but serve a good purpose in helping the food retailer to orient himself as to what progress his store is making.

Finally, the previous statements lead to the fact that the store manager must realize that the management function must be carried out in his store. It must be made separate and distinct from the daily routine. The store owners must realize that the work of planning, organizing, and controlling in the store operation is very important. Too many store owners spend too much time with the little details that their subordinates could handle and too little time in finding out just where they will be in future years and how they will be getting there. The store owners must learn to run the business and not let the business run them.

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ANALYSIS AND EVALUATION OF RECORD KEEPING SYSTEMS
IN SELECTED OHIO RETAIL FOOD STORES

49

~~Abstract~~

A Thesis

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Presented in Partial Fulfillment of the Requirements
for the Degree Master of Science

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By
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1956

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Approved by:

Advisor
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**ANALYSIS AND EVALUATION OF RECORD KEEPING SYSTEMS
IN SELECTED OHIO RETAIL FOOD STORES**

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B.S., Purdue University, 1955

Department of Agricultural Economics
and Rural Sociology
(Approved by R. W. Sherman)

For this study, eight retail food stores, four in Marion, Ohio varying in total annual sales volume from \$65,000.00 to \$145,000.00 and four in Columbus, Ohio varying in total ^{annual} ~~annual~~ sales volume from \$460,000.00 to \$1,500,000.00, were selected. Information was desired as to what kind of records that were being kept and how their analysis was being used in pointing up the strong and weak points of the business. This information was collected in one of a series of three or more interviews ^{at} for each store, designed to yield the complete data in the store records for 1955 and 1956-to-date of the interviews and other pertinent information concerning store management practices that would be useful in a complete record analysis.

The objective of this study is to establish a set of principles of good record keeping and a form for the retail grocers to use in analyzing their records in search

ff of methods of improving their store operations. A description of the individual record keeping systems, their use in the operation of the business and any peculiarities that would effect the analysis were listed. ~~A dual level yard-stick or standard was devised and the individual record keeping systems were compared to it at the levels of up to \$250,000.00 total annual sales and from \$250,000.00 and up total annual sales-four stores in each group.~~ The individual stores were compared with each other and national averages; then, conclusions and recommendations as to the weak points and general methods of correction were made.

In general, it was found that fairly complete and accurate records were kept in all cases. However, there was a wide divergence in the form used and the organization thereof. There was also a wide variation in use of the records in analyzing the business. In addition, there was little follow through used by the store owners in picking out the weak points^{by use of the record systems} and then going ahead and taking measures to correct them. The major fault predominant in all cases was that the record keeping systems did not go into enough detail in projecting the analysis into the future for use in planning improvements in the business. The standards were devised with the thought in mind of correcting the before mentioned weaknesses. In conclusion, the effort was made to distinguish the store managements' function from that of the routine daily work and to emphasize the importance of the management function in assuring the continued improvement of the individual businesses.

and you can see that it's not possible to do that. So I think that's a very important point.

* longer standards or yardstick was developed for the banks,
of 250,000 Dts annual sales and more than 250,000 Thsd
annual sales, and the individual store record buying system
was compared to it.

When many collections of plant fossils have been made, it is often difficult to determine which species are common to all collections.

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and I never saw it in fact after about a month or two
it just disappeared and was never mentioned again.